DATA QUALITY

The key to data-driven decision-ma

DATA QUALITY!

- WHY DO WE CARE?
- WHERE CAN WE DETECT PROBLEMS?
- WHAT IS HAPPENING TO FIX THEM?
- WHAT ARE THE BEST TARGETS?

WHY DO WE CARE?

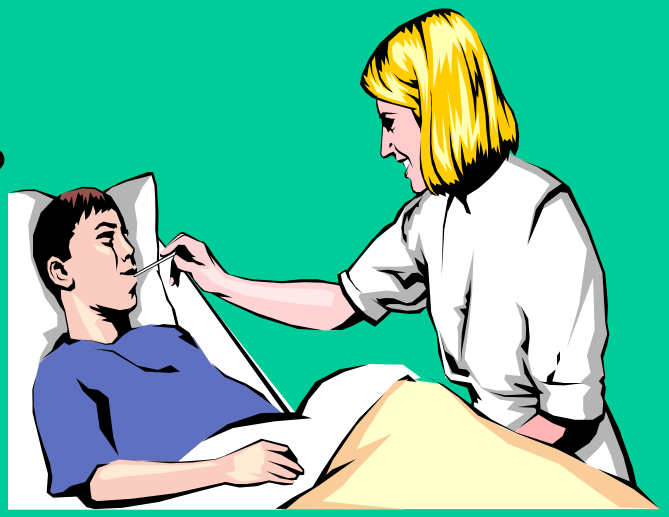
Motivation for Data Quality

Motivation for Data Quality

1. **Clinical Quality**
2. **Efficient Use of Resources**
3. **Benchmark Healthcare System**
4. **Defense of Performance**

1 Clinical Quality

- Continuity of Care
  - What has been wrong with the patient?
  - What has been done with the patient?
  - Where was it done (and might have records)?
  - Who was the provider?
  - Have follow-ups occurred?



Clinical Quality

- Practice pattern evaluation & improvement
  - Provider & Disease views
  - Referral paths (inferred)
  - Procedure rates (C-sections/delivery)
  - Length of stay variation
  - Preventable admissions
  - Prophylactic & surveillance services
  - PCM effectiveness (except for MTFs)

Clinical Quality

- Medical geography improvement

  Geographical anomalies, perhaps due to:

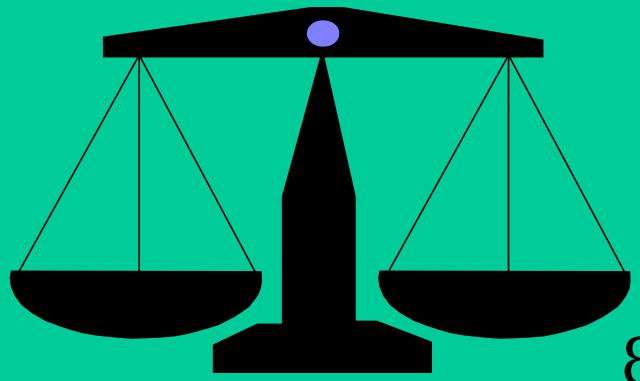
  - Peer behavior patterns
  - Unusual endemic incidence of disease
  - Migration of patients to care

Clinical Quality

- Utilization review/drug utilization review

  REQUIRES ACCURATE

  - Patient demographics
  - Disease identification/coding
  - Procedure identification/coding
  - Other treatment attributes (drugs, LOS, etc.)



Clinical Quality

- Case & disease management
  - Requires same accuracy as UR
  - But with focus on diseases or cost outliers

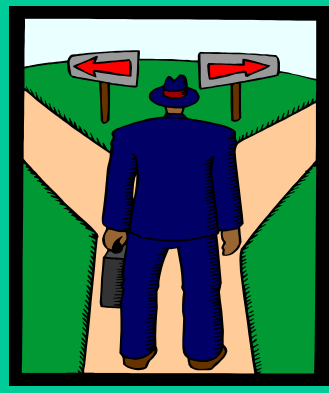
2 Efficient Use of Resources

- Tricare for Life (TFL) earnings/planning
  - DHP decremented and “accrual fund” built
  - DHP gets money based on TFL care in data
  - Future payments into fund are driven by data
  - Non-military TFL earn fund $, no longer TPOC
  - **DATA QUALITY AFFECTS IT ALL!** encounters

Efficient Use of Resources

- Itemized Billing
  - TPOC policy switching to line-item billing
  - Payers refuse items with clear contradictions
  - Under-reporting and non-reporting both cost $

Efficient Use of Resources



- Make vs. Buy Decisions

  REQUIRE ACCURATE

  - Well-defined products (services)
  - Cost of making (MEPRS & encounters)
  - Cost of buying (HCSR & RS data)
  - Other variables may be important for scenarios (e.g., people & force unit changes)

Efficient Use of Resources

- BPA Payments

  REQUIRE ACCURATE

  - OP visit workload
  - Attribution to work center (OB or not OB)
  - In Revised Financing, enrollment status for:
    - Network claims (MTF enrollees)
    - OP visit workload (excludes MTF enrollees)
    - MTF enrollment vs. projections (in global adjustments)

Efficient Use of Resources

- Productivity Management

  REQUIRES ACCURATE

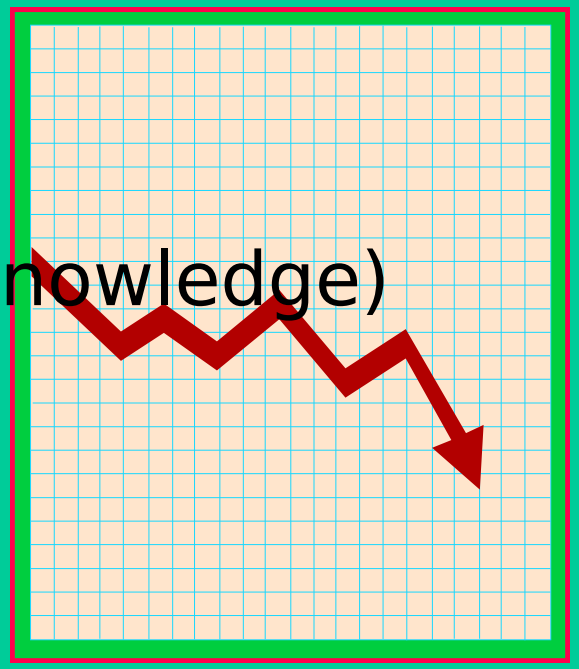
  - Information about production (workload)
  - Information about producers (FTEs, providers, etc.)

3 Benchmark Healthcare System

- Patient Satisfaction
  - DEERS' DQ can deny access or claims
  - CHCS' DQ can hurt PCM access/effectiveness
- Contractor Satisfaction
  - DQ problems can hurt contractor performance
  - Which can also harm relations with contractor

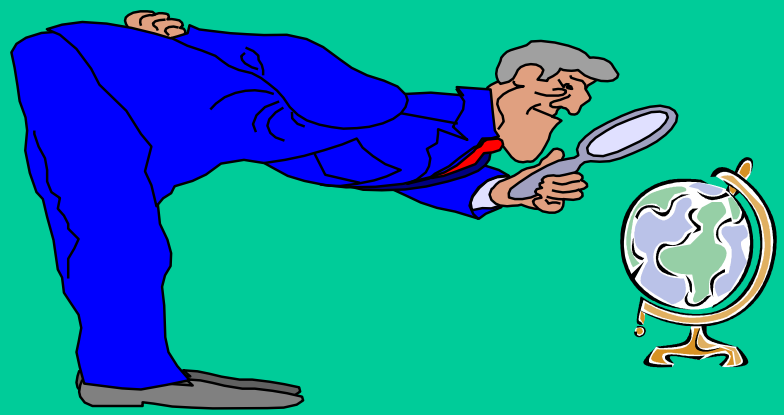
4 Defense of Performance

- "Canned" reports
  - May not always reflect accurate information
  - "Problems" may reflect:
    - Data quality problem
    - Misuse of reporting tool
    - Misuse of data (poor data knowledge)
    - Real world shortcoming



4 Defense of Performance

- "Canned" reports
- Valid reports can be created
  - Detecting problems in "canned reports"
  - Revealing when problems are in real world



Indicators of Data Quality Problems

Indicators of Data Quality Problems

- Central Metrics
- Service Metrics
- Local Metrics

Central Metrics

- Common corporate DQ metrics found in:
  - MHSER
  - TOPS
  - Data Quality

    www.tricare.osd.mil/dataquality/reports.htm
- Common corporate metrics include:
  - MEPRS compliance
  - SADR counts vs. WWR workload
  - SIDR Timeliness

Central Metrics

- Application of corporate metrics
  - Defense of performance (for MTF staff)
  - Visibility of problems (for higher staffs)
  - But Timeliness is a drawback!

Service Metrics

- Information agencies have active web sites
  - AFMOA

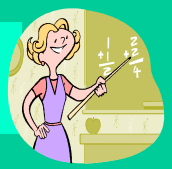
https://bdqas.afms.mil/

  - PASBA

http://pasba.amedd.army.mil

  - NMIMC

https://imcenter.med.navy.mil/default.asp

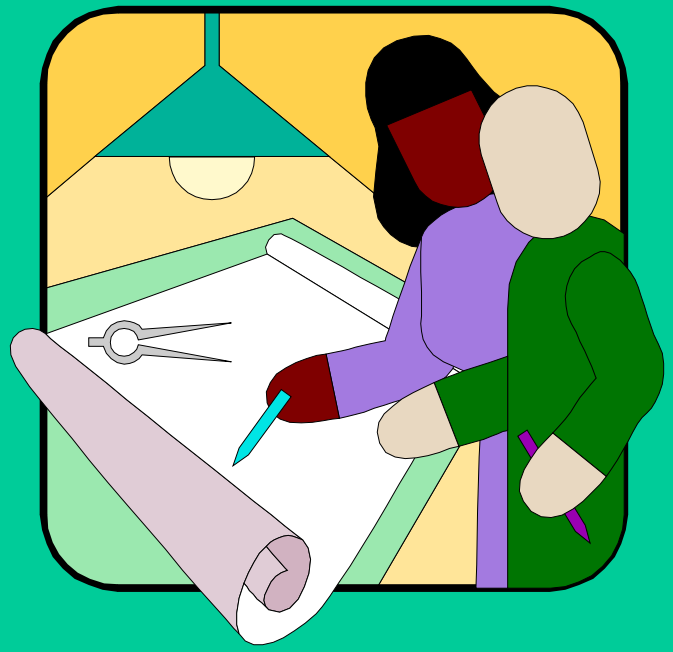


Service Metrics

- Typical metrics
  - SIDR timeliness
  - SADR completion rates
  - MEPRS completion rate
  - Enrollment reconciliation to DEERS
- Different rules applied by each
- More timely, used for interventio

Local Metrics

- Using M-2



Data Quality Initiatives

Data Quality Initiatives

1. **Internal Management Control**
2. **MMIG Interim Reconciliation**
3. **MEWACS**
4. **Service Initiatives**
5. **Education Supporting DQ**

1 Internal Management Control

- Active Commander Participation
  - Certifies report accuracy
  - Explains failure to meet standards
  - Alerts to systematic problems affecting DQ

Internal Management Control

- Typically managed by local DQ manager

  Supported by a cross spectrum team (DQ Action Team)

Internal Management Control

- MTF-level report passes through medical hierarchy channels to TMA

Internal Management Control

- Contains several standard metrics
  - Completeness
    - SIDR, SADR vs. WWR
  - Close-out of appointments
    - End-of-day processing done daily
  - Clinical coding
    - Manual audit of random sample of OP records
  - Patient records management
    - Attempt to locate random sample of OP

Internal Management Control

- Contains several standard metrics (cont.)
  - Reconciliation
    - DFAS O&M to MEPRS Expenses
    - IP MEPRS to CHCS Monthly Detail Report
    - OP MEPRS to CHCS Monthly Statistical Report (MSR)
  - System Administrator Training
    - Existence of SOPs, adequate training
  - Configuration Management
    - Proper versions of tables, software, etc.

2 MMIG Interim Reconciliation

- MEPRS Management Improvement Group (MMIG)
  - –TMA Resource Management oversight
  - –Can define new reconciliations
  - –IMC may make these permanent

3 MEWACS

(MEPRS Early Warning and Control System)

- MMIG is Proponent
- EAS IV Based
- Downloadable report from the web:

www.tricare.osd.mil/ebc/rm_home/imcp/mep/index.htm

4 Service Initiatives

Each service has its own data quality manager and initiatives to support DQ improvement.

Data Quality Initiatives

5 Education Supporting DQ

- Data Quality Course
  - Proponent: TMA HPA&E
  - Offered: Quarterly in Washington, D.C
  - Target: DQ Managers
  - Sign up: via web @ www.tricare.osd.mil/dataquality/resources.htm

Education Supporting DQ

- WISDOM
  - Offered: Bi-monthly in D.C. & San Antonio, TX
  - Target: Decision makers & support analysts
  - Content:
    - Decision-making
    - Analysis methods
    - MHS data peculiarities
    - Business Objects in the M2 (ARS Bridge)

Education Supporting DQ

- WISDOM (cont.)
  - Sign-up: for interim through M2 FPG Svc Rep
    - Army: Ron.James@cen.amedd.army.mil
    - Navy: MACorriere@us.med.navy.mil
    - Air Force: Detlev.Smaltz@pentagon.af.mil
      Corey.Ritchie@pentagon.af.mil
    - Lead Agents/TMA: Steve.Hill@tma.osd.mil
    - HA: Gregory.Atkinson@tma.osd.mil

Education Supporting DQ

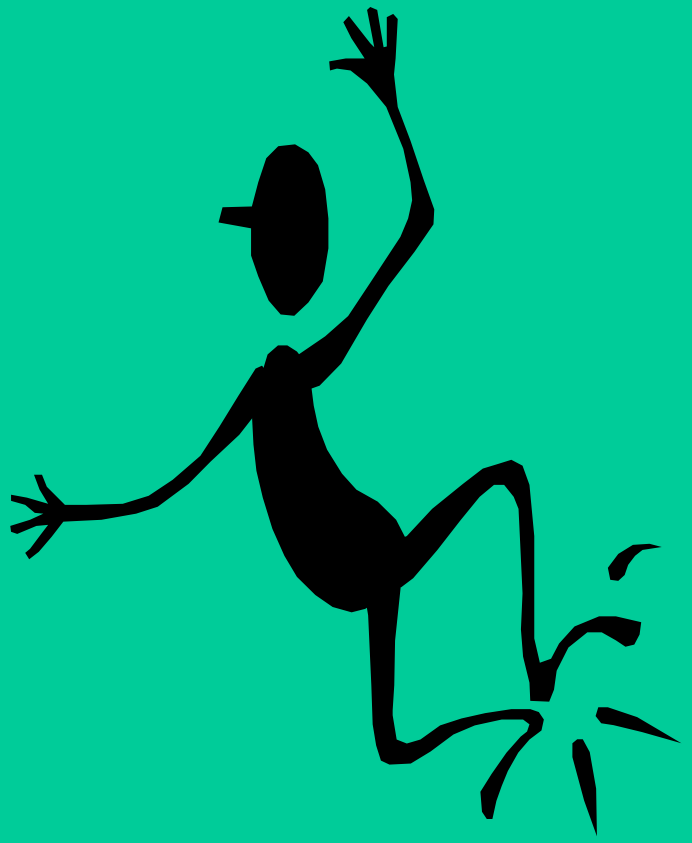
- TFMEP
  - Offered: Quarterly in D.C. or elsewhere
  - Target: RM staff
  - Sign-up: via web @

    http://www.tricare.osd.mil/ebc/rm/rm_home.html
  - Content: Subjects & skills for resource managers

Education Supporting DQ

- MEPRS Application & Data Improvement (MADI) Workshop
  - Offered: Multiple regional locations
  - Target: Management, analysts of MTF-level workload & cost data (RM, MEPRS, DQ personnel)
  - Sign-up: via web @ http://www.tricare.osd.mil/otto77/meprseducation
  - Content: Interpretation/application/reporting of MEPRS data in the EAS IV Repository.

Low Hanging Fruit



Low Hanging Fruit

- SADR Compliance & Validity
- Targeted Reconciliation
- FTE Reconciliation
- Smoothing the non-accrued costs

DATA QUALITY

The key to data-driven decision-ma